

Payment will be made under:

Item No. 540	Removal of existing bridge ___ sta _____	Per lump sum
Item No. 540	Removal of parts of existing bridge ___ sta _____	Per lump sum

### 540.5.01 Adjustments

General Provisions 101 through 150.

## **Section 541—Detour Bridges**

### **541.1 General Description**

This work consists of constructing, maintaining, and removing detour bridges.

Construct detour bridges the width and length required on the Plans. (The bridge width is the clear distance between curbs or hubguards.) Construct the bridges at the locations required on the Plans and provide the necessary end walls or bulkheads as part of the Work.

#### **541.1.01 Definitions**

General Provisions 101 through 150.

#### **541.1.02 Related References**

##### **A. Standard Specifications**

Section 104—Scope of Work

Section 105—Control of Work

Section 540—Removal of Existing Bridge

##### **B. Referenced Documents**

AASHTO HS-15

AASHTO Standard Specifications for Highway Bridges

Georgia Standard 4960 and 4961

#### **541.1.03 Submittals**

##### **A. Bridge Design Considerations**

Unless otherwise shown, design detour bridges for an AASHTO HS-15 live load capacity. This capacity is based on the working stresses allowed for the materials used and for the design criteria of the AASHTO Standard Specifications for Highway Bridges.

The Contractor may omit lane loadings from design considerations. Load factor design is allowed.

##### **B. Bridge Drawings**

Submit the proposed layout and details for each detour bridge to the Engineer for review as follows:

1. Do not begin work until the drawings have been approved.
2. Submit drawings in either of the following forms:
  - Three prints
  - A reproducible drawing

The Engineer can require the Contractor to change the drawings to conform to the Specifications.

3. After making required changes, resubmit the drawings for final review.

## 541.2 Materials

Use materials approved by the Department. Material restrictions are as follows:

- Do not use timber in the superstructure.
- Do not use structurally unsound materials of any type.

Piling may be timber. Tight bark does not need to be removed from timber piles.

### 541.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

## 541.3 Construction Requirements

### 541.3.01 Personnel

General Provisions 101 through 150.

### 541.3.02 Equipment

General Provisions 101 through 150.

### 541.3.03 Preparation

General Provisions 101 through 150.

### 541.3.04 Fabrication

General Provisions 101 through 150.

### 541.3.05 Construction

#### A. Construct the Detour Bridge

Construct the detour bridge according to drawings approved by the Engineer.

#### B. Construct Safety Features

Construct either of the following safety features at both ends of the detour bridge:

##### 1. Guard rail

Construct according to the Construction Details shown in the Plans.

##### 2. Precast median barrier according to Ga. Std. 4960 and 4961

When the precast median barrier option is selected, construct the barrier as follows:

- a. Place the precast median barrier on both sides and both ends of the detour bridge unless otherwise directed by the Engineer.
- b. Ensure that the barrier extends at least 40 ft (12 m) from the bridge ends unless the Plans show otherwise.

#### C. Remove the Detour Bridge

After the permanent construction is open to traffic, remove the detour bridge according to Section 540.

Material salvaged from the detour bridge remains the property of the Contractor. Consider the salvage value when compiling the bid.

### 541.3.06 Quality Acceptance

General Provisions 101 through 150.

### 541.3.07 Contractor Warranty and Maintenance

#### A. Maintain the Detour Bridge

Except as otherwise provided in Subsection 104.05.D, "Detours Outside Right-of-Way," maintain the detour bridge so it can safely carry the design loading at all times. Furnish labor and material to maintain the bridge.

If the Engineer determines that the detour bridge endangers public safety, promptly repair the bridge. If the bridge is not repaired immediately, the Engineer will proceed according to Subsection 105.15, "Failure to Maintain Roadway or Structures."

## 541.4 Measurement

This work will not be measured separately for payment.

### 541.4.01 Limits

General Provisions 101 through 150.

## 541.5 Payment

This work will be paid for at the Contract Price per detour bridge complete in place, maintained, and removed.

Payment will be made under:

Item No. 541	Detour bridge (requires width, length, and sta. no.)	Per lump sum
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### 541.5.01 Adjustments

After the detour bridge is completed, the Engineer will include 80 percent of the Contract Price for the detour bridge in the next statement.

After the detour bridge is satisfactorily removed, the Engineer will include the remaining 20 percent in the next statement.

## **Section 542—Contractor Proposed Alternate to Reinforced Concrete Deck Girder**

## 542.1 General Description

This Specification covers design requirements for superstructures proposed by the Contractor as alternates to cast-in-place reinforced concrete deck girder structures.

This work is limited to construction using precast reinforced or precast prestressed concrete stems, including AASHTO Type I beams.

For areas not specifically covered in this Specification, refer to the applicable portions of the Project Specifications, Standard and Supplemental Specifications of the Department, and Part I of the AASHTO Specifications for Highway Bridges with interim and Guide Specifications.

### 542.1.01 Definitions

General Provisions 101 through 150.

### 542.1.02 Related References

#### A. Standard Specifications

Section 105—Control of Work

#### B. Referenced Documents

AASHTO Specifications

AASHTO Specifications for Highway Bridges, including interim and Guide Specifications

### 542.1.03 Submittals

#### A. Department's Responsibilities

The Department will quickly review submittals to avoid delaying the Contractor's scheme.

The Department will judge the completeness, accuracy, and structural acceptability of submittals.

#### B. Contractor's Bid Price

Include the following in the bid price:

- Costs for complying with this Specification
- Costs for completing and revising the Department Plans